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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,262	12/21/2001	Takeo Seino	Q67855	4884

7590

04/04/2003

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EXAMINER

VO, ANH T N

ART UNIT	PAPER NUMBER
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2861

DATE MAILED: 04/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
10/024,262

Applicant(s)

SEINO ET AL.

Examiner

Anh T. N. Vo

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-11 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 5 and 8
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Oath/Declaration

The declaration filed 14 May 2002 is acceptable.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The references cited on PTO 1449 have been considered.

Specification

The specification has been checked to the extent necessary to determine the presence of all possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objection

Claim 11 objected to because of the following informalities: the recitation "portion" should be changed to --port-- to avoid an antecedent basis problem. Appropriate correction is required.

CLAIM REJECTIONS

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Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 and 9-11 are rejected under 35 USC 102 (b) as being anticipated by Gasvoda et al. (US Pat. 5,949,459).

Gasvoda et al. disclose in Figures 3-7 an ink container using in an ink jet printer comprising:

- an inherent reciprocally movable carriage (not shown) (Figure 2);
- an ink jet recording head (not shown) provided on the carriage (Figure 2);
- a container (12) having a bottom surface and defining at least one ink chamber (112) (Figures 3-4);
- a protruded portion (110) protruded from the bottom surface and defining an ink supply passage (30) (Figure 7);
- an ink supply port (114), provided to the protruded portion, having an opening surface substantially perpendicular to the bottom surface (Figure 7);
- a guide portion (110 and 124 which is defined a protrusion therein) located between the bottom surface (108) and the opening surface (Figure 7);
- a normally-closed valve system (118, 116) provided near the ink supply port (114);
- a recess (28) communicating with the ink chamber (112) and formed in an upper surface of the container (12) (Figure 7);

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- a breakable film (128, 130) sealing the recess (28) (Figure 7);
- a breaking system (102, 106, 108) for breaking a film (128, 130) which sealingly covers an atmosphere communicating recess (28) formed in an upper surface of the ink cartridge (12);
- wherein the ink supply passage (110) is disposed at a predetermined distance from the bottom surface and located within an area below the bottom surface (Figure 7);
- wherein the ink supply port (114) is connectable to an ink guide member (92) communicating with an inherent recording head (not shown) of an ink jet recording apparatus (10) (Figures 2 and 7); and
- wherein the guide portion (110 and 124 which is defined a guide protrusion) is guided by a protrusion (two parallel rod 90) of an ink jet recording apparatus (10) when the ink supply port (110) is connected to an ink guide member (92) communicating with a recording head of the ink jet recording apparatus (10) (Figures 2 and 7).

Claims 1, 3-5 and 9-11 are rejected under 35 USC 102 (b) as being anticipated by Shimada et al. (US Pat. 6,086,139). *6,086,193*

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Shimada et al. disclose in Figures 1, 3, 6-8 and 12 an ink cartridge using in an ink jet printer comprising:

- a container (70) having a bottom surface and defining at least one ink chamber (102a-102e) (Figure 6);
- a protruded portion (112) protruded from the bottom surface (108) and defining an ink supply passage (Figure 6);
- an ink supply port (110a-110e), provided to the protruded portion (112), having an opening surface substantially perpendicular to the bottom surface (Figures 6-7);

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- a guide portion (117) located between the bottom surface (108) and the opening surface (Figure 8);
- a normally-closed valve system provided near the ink supply port .
- a recess (134a-134d) communicating with the ink chamber (102a-102e) and formed in an upper surface of the container (70) (Figures 7-8 and 12);
- a breakable film (135) sealing the recess (134a-134e) (Figures 7-8 and 12);
- a capillary of a narrow groove (133) formed in the upper surface (120) of the container (70), wherein the recess (134a-134d) communicates with the ink chamber (102a-102e) through the capillary (Figures 7-8 and 12);
- a reciprocally movable carriage (30) (Figures 1 and 3);
- an ink jet recording head (28) provided on the carriage (30) (Figure 3);
- an ink guide member (117) through which ink in the ink cartridge (70a-70e) being mounted on the carriage (30) is supplied to the ink jet recording head (28), the ink guide member (117) having a horizontally protruded leading end (Figures 3 and 6-8);
- a protrusion (101), horizontally protruded near the ink guide member (117), for engagement with the ink cartridge (70a-70e);
- wherein the ink supply passage (110a-110e) is disposed at a predetermined distance from the bottom surface (108) and located within an area below the bottom surface (Figures 7-8);
- wherein the ink supply port (110a-110e) is connectable to an ink guide member (72-76) communicating with a recording head (28) of an ink jet recording apparatus (20) (Figures 1, 3 and 7-8); and
- wherein the guide portion (117) is guided by a protrusion (101) of an ink jet recording apparatus (20) when the ink supply port (110a-110e) is connected to an ink guide member (72-76) communicating with a recording head (28) of the ink jet recording apparatus (20) (Figures 1, 3, and 7-8).

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior arts are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 8 are rejected under 35 USC 103 (a) as being unpatentable over Shimada et al. (US Pat. 6,086,193) in view of Ikeda et al. (US Pat. 6,179,416).

Shimada et al. disclose the basic features of the claimed invention was stated above but do not disclose an ink container having an ink supply passage extends substantially parallel to the bottom surface of the ink container.

However, Ikeda et al. disclose in Figures 1-4 an ink container (1) using in an ink jet printer comprising an ink supply passage (7) extends substantially parallel to the bottom surface (11) of the ink container (1).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate the teaching of Ikeda et al. into the Shimada et al ink cartridge for the purpose of providing the ink supply passage which supplies ink from the ink container to an ink jet printhead of the an ink jet printer.

Allowable Subject Matter

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Claim 7 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims. This claim would be allowable because none of the prior art references of record discloses the breaking system breaks the film before the ink guide member engages the ink cartridge to allow ink to be supplied to the ink jet recording head in the combination as claimed.

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo whose telephone number is (703) 305-8194. The examiner can normally be reached on Tuesday to Friday from 8:00 A.M. to 6:00 P.M. The fax number of this Group 2800 is (703) 305-3431 or 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308- 0956.


ANH T.N. VO
PRIMARY EXAMINER

April 2, 2003